<u>RAW SEQUENCE LISTING</u>

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: /0/582,277
Source: /Fw/P
Date Processed by STIC: 6/21/06

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: _10/582,277_   CRF Edit Date: _6/21/06_
                                      Edited by: _____

____ Realigned nucleic acid/amino acid numbers/text in cases where the sequence
text "wrapped" to the next line

____ Corrected the SEQ ID NO. Sequence numbers edited were:

_____

____ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID
NO's edited:

_____

____ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

____ Inserted mandatory headings/numeric identifiers, specifically:

_____

____ Moved responses to same line as heading/numeric identifier, specifically:

_____

____ Other:

_____
_____
_____

Revised 09/09/2003

RAW SEQUENCE LISTING   DATE: 06/21/2006
PATENT APPLICATION: US/10/582,277   TIME: 15:41:21

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\06212006\J582277.raw**

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   4         Rasmussen, Michael Dolberg
   6 <120> TITLE OF INVENTION: A cell with improved`secretion mediated by MrgA protein or
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   9 <130> FILE REFERENCE: 10527.204-US
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/582,277
C--> 11 <141> CURRENT FILING DATE: 2006-06-10
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  13 <170> SOFTWARE: PatentIn version 3.3
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RAW SEQUENCE LISTING   DATE: 06/21/2006
PATENT APPLICATION: US/10/582,277   TIME: 15:41:21

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Output Set: **N:\CRF4\06212006\J582277.raw**

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86 65                   70               75                80
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90              85               90                95
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RAW SEQUENCE LISTING   DATE: 06/21/2006
PATENT APPLICATION: US/10/582,277   TIME: 15:41:21

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\06212006\J582277.raw

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VERIFICATION SUMMARY   DATE: 06/21/2006
PATENT APPLICATION: US/10/582,277   TIME: 15:41:23

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\06212006\J582277.raw**

L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

Raw Sequence Listing before editing
(for reference only)

IFWP

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RAW SEQUENCE LISTING                        DATE: 06/19/2006
PATENT APPLICATION:  US/10/582,277          TIME: 12:17:29

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ERRORED SEQUENCES

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  634 ttcgttcaga cttgtgctta tgtgcacgct gttatttgtc agtttgccga ttacaaaaac      180
  636 atcagccgta aatggcacgc tgatgcagta ttttgaatgg tatacgccga acgacggcca      240
  638 gcattggaaa cgattgcaga atgatgcgga acatttatcg gatatcggaa tcactgccgt      300
  640 ctggattcct cccgcataca aaggattgag ccaatccgat aacggatacg gaccttatga      360
  642 tttgtatgat ttaggagaat tccagcaaaa agggacggtc agaacgaaat acggcacaaa      420
  644 atcagagctt caagatgcga tcggctcact gcattcccgg aacgtccaag tatacggaga      480
  646 tgtggttttg aatcataagg ctggtgctga tgcaacagaa gatgtaactg ccgtcgaagt      540
  648 caatccggcc aatagaaatc aggaaacttc ggaggaatat caaatcaaag cgtggacgga      600
  650 ttttcgtttt ccgggccgtg gaaacacgta cagtgatttt aaatggcatt ggtatcattt      660
  652 cgacggagcg gactgggatg aatcccggaa gatcagccgc atctttaagt ttcgtgggga      720
  654 aggaaaagcg tgggattggg aagtatcaag tgaaaacggc aactatgact atttaatgta      780
  656 tgctgatgtt gactacgacc accctgatgt cgtggcagag acaaaaaaat ggggtatctg      840
  658 gtatgcgaat gaactgtcat tagacggctt ccgtattgat gccgccaaac atattaaatt      900
  660 ttcatttctg cgtgattggg ttcaggcggt cagacaggcg acgggaaaag aaatgtttac      960
  662 ggttgcggag tattggcaga ataatgccgg gaaactcgaa aactacttga ataaaacaag     1020
  664 ctttaatcaa tccgtgtttg atgttccgct tcatttcaat ttacaggcgg cttcctcaca     1080
  666 aggaggcgga tatgatatga ggcgtttgct ggacggtacc gttgtgtcca ggcatccgga     1140
  668 aaaggcggtt acatttgttg aaaatcatga cacacagccg ggacagtcat ggaatcgac      1200
  670 agtccaaact tggtttaaac cgcttgcata cgcctttatt ttgacaagag aatccggtta     1260
  672 tcctcaggtg ttctatgggg atatgtacgg gacaaaaggg acatcgccaa aggaaattcc     1320
  674 ctcactgaaa gataatatag agccgatttt aaaagcgcgt aaggagtacg catacgggcc     1380
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RAW SEQUENCE LISTING   DATE: 06/19/2006
PATENT APPLICATION: US/10/582,277   TIME: 12:17:29

Input Set : A:\01-SQ Listing-07 Jun 2006.txt
Output Set: N:\CRF4\06192006\J582277.raw

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676 ccagcacgat tatattgacc acccggatgt gatcggatgg acgagggaag gtgacagctc 1440
678 cgccgccaaa tcaggtttgg ccgctttaat cacggacgga cccggcggat caaagcggat 1500
680 gtatgccggc ctgaaaaatg ccggcgagac atggtatgac ataacgggca accgttcaga 1560
682 tactgtaaaa atcggatctg acggctgggg agagtttcat gtaaacgatg ggtccgtctc 1620
684 catttatgtt cagaaataag gtaataaaaa aacacctcca agctgagtgc gggtatcagc 1680
686 ttggaggtgc gtttattttt tcagccgtat gacaaggtcg gcatcaggtg tgacaacgcg 1740
688 tgatccagac cagttccctg agcttccgtc agtcggatcc cattgcggaa aatagtcata 1800
690 ggcatcctgg aattcaatgt tgcgaataat gacgttatca ctcttgattt ggaagtttcc 1860
692 tcccacgact ttagcgttag tccctgaacc gacgatcgtc gtgtttgcag ggatatccac 1920
694 catgacccgt gctttttggt ttttctgaga gcgtgctctc gcttcttctt gtgttcccga 1980
696 cggctctttt ttgccccatg tgctaggatc ataggctttc aaatatttgt ccaaatcata 2040
698 ctccggatct ttatagtcat ttaggccaag cggcttcaga ttgtcatcca cgttcatgtc 2100
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702 gacaagctgg tttctgttgc tgacggtata cacatttgag gaggatgctt ttgatccgcc 2220
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706 atcagctgcg ttcgcgccag ctggagtcaa tcctaaaaac aaagccgtag ctaacatcaa 2340
708 aagggcctcg tgatacgcct attttttatag gttaatgtca tgataataat ggtttcttag 2400
710 acgtcaggtg gcacttttcg gggaaatgtg cgcggaaccc ctatttgttt attttctaa 2460
712 atacattcaa atatgtatcc gctcatgaga caataaccct gataaatgct tcaataatat 2520
714 tgaaaaagga agagtatgag tattcaacat ttccgtgtcg cccttattcc ctttttttgcg 2580
716 gcattttgcc ttcctgtttt tgctcaccca gaaacgctgg tgaaagtaaa agatgctgaa 2640
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720 gagagttttc gccccgaaga cgttttcca atgatgagca cttttaaagt tctgctatgt 2760
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724 tctcagaatg acttggttga gtactcacca gtcacagaaa agcatcttac ggatggcatg 2880
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730 catgtaactc gccttgatcg ttgggaaccg gagctgaatg aagccatacc aaacgacgag 3060
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742 gctgagatag gtgcctcact gattaagcat tggtaactgt cagaccaagt ttactcatat 3420
744 atactttaga ttgatttaaa acttcatttt taatttaaaa ggatctaggt gaagatcctt 3480
746 tttgataatc tcatgaccaa aatcccttaa cgtgagtttt cgttccactg agcgtcagac 3540
748 cccgtagaaa agatcaaagg atcttcttga tccttttttt ttctgcgcgt aatctgctgc 3600
750 ttgcaaacaa aaaaaccacc gctaccagcg gtggtttgtt tgccggatca agagctacca 3660
752 actctttttc cgaaggtaac tggcttcagc agagcgcaga taccaaatac tgtccttcta 3720
754 gtgtagccgt agttaggcca ccacttcaag aactctgtag caccgcctac atacctcgct 3780
756 ctgctaatcc tgttaccagt ggctgctgcc agtggcgata agtcgtgtct taccgggttg 3840
758 gactcaagac gatagttacc ggataaggcg cagcggtcgg gctgaacggg gggttcgtgc 3900
760 acacagccca gcttggagcg aacgacctac accgaactga gatacctaca gcgtgagcta 3960
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770 gccaggggga catgccggcg atgctgaagg tcgcgcgcat tcccgatgaa gaggccggtt 4260
772 accgcctgtt tgaggatata gtaatctttc taaatagctt tggattggag gagtatgggg 4320
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794 ggatattgag atgatgtgtg tcatgtcaac agaggaagca gagttcagcc atgaatggac 4980
796 aaccggtgag tggaaggtgg aagtgaattt tgatagcgaa gagattctac tagattatgc 5040
798 atctcaggtg gaatcagatt ggccgcttac acatggtcaa tttttctcta ttttgccgat 5100
800 ttatgattca ggtggatact tagagaaagt gtatcaaact gctaaatcgg tagaagccca 5160
802 aacgttccac gatgcgattt gtgcccttat cgtagaagag ctgtttgaat atgcaggcaa 5220
804 atggcgtaat attcgtgtgc aaggaccgac aacatttcta ccatccttga ctgtacaggt 5280
806 agcaatggca ggtgccatgt tgattggtct gcatcatcgc atctgttata cgacgagcgc 5340
808 ttcggtctta actgaagcag ttaagcaatc agatcttcct tcaggttatg accatctgtg 5400
810 ccagttcgta atgtctggtc aactttccga ctctgagaaa cttctggaat cgctagagaa 5460
812 tttctggaat gggattcagg agtggacaga acgacacgga tatatagtgg atgtgtcaaa 5520
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826 ttagcagaag catcaatcga tccatgcaga gacggcgtcc agccgacaga agagctcagc 5940
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856 atttaagtta aacccagtaa atgaagtcca tggttatgtc tttgtatccc gtttgtatta 6840
858 cttgatcctt taactctggc aacccctcaaa attgaatgag acatgctaca cctccggata 6900
860 ataaatatat ataaacgtat atagatttca taaagtctaa cacactagac ttatttactt 6960
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866 catccgattg cagtataaat ttaacgatca ctcatcatgt tcatatttat cagagctcgt 7140
868 gctataatta tactaatttt ataaggagga aaaaatatgg gcatttttag tatttttgta 7200
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882 aatttcctaa aaaccaatcc tataaaatat atggtaatat accttataac ataagtacgg    7620
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886 acgggtttgc taaaagatta ttaaatacaa aacgctcatt ggcattactt ttaatggcag    7740
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890 tgaatagctc acttatcaga ttaagtagaa aaaaatcaag aatatcacac aaagataaac    7860
892 aaaagtataa ttatttcgtt atgaaatggg ttaacaaaga atacaagaaa atatttacaa    7920
894 aaaatcaatt taacaattcc ttaaaacatg caggaattga cgatttaaac aatattagct    7980
896 ttgaacaatt cttatctctt ttcaatagct ataaattatt taataagtaa gttaagggat    8040
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E--> 906 (16)
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VERIFICATION SUMMARY   DATE: 06/19/2006
PATENT APPLICATION: **US/10/582,277**   TIME: 12:17:30

Input Set : **A:\01-SQ Listing-07 Jun 2006.txt**
Output Set: **N:\CRF4\06192006\J582277.raw**

L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:906 M:254 E: No. of Bases conflict, this line has no nucleotides.